

IX.—Recent Ornithological Publications.

1. ENGLISH PUBLICATIONS.

IN our own country we have to welcome the appearance of the 3rd and 4th Parts of Mr. Gould's 'Birds of Great Britain,' in which the following species are illustrated:—

Part III.

Golden Eagle.	Great Spotted Woodpecker.
Sea-Eagle.	Lesser Spotted Woodpecker.
Nightjar or Goatsucker.	Green Woodpecker.
Great-crested Grebe.	Nuthatch.
Red-necked Grebe.	Land-Rail.
Eared Grebe.	Water-Rail.
Swallow.	Meadow-Pipit.
Sand-Martin.	

Part IV.

Common Buzzard.	Common Snipe.
Snowy Owl.	Great Snipe.
Long-eared Owl.	Summer Snipe.
Short-eared Owl.	Steller's Duck.
Pallas's Sandgrouse.	Goldfinch.
Wren.	Common Sparrow.
Golden-crested Wren.	Tree-Sparrow.
Fire-crested Wren.	

Of the merits of this great work we have already spoken in a former notice of the two first parts*. It will be observed that, in the case of the Eared Grebe, Mr. Gould has rightly rejected the specific term *auritus*, which Temminck misapplied to this bird, the true *Colymbus auritus* of Linnæus being, no doubt, nothing more than the *Podiceps cornutus*, or Slavonian Grebe. The Eared Grebe of the South of Europe and Northern Africa (concerning the breeding of which Mr. Tristram has given us some details in a former volume of this Journal†) is correctly named *Podiceps nigricollis* (Gm.).

'Natural History and Sport in Moray, collected from the Journals and Letters of the late Charles St. John,' is the title of a volume recently‡ published in Edinburgh, consisting "entirely of the observations and notes of Charles St. John,"

* Ibis, 1863, p. 102.

† Ibis, 1860, p. 159.

‡ Edmonston and Douglas, 1863.

the author of a well-known and deservedly popular book, called 'Wild Sports of the Highlands.' "It is made up of entries in his journals and note-books, incidents in letters to his friends, and a careful description of the Birds of Moray which he left in MS. With these materials, hitherto unpublished, the substance of the 'Field Notes of a Naturalist,' which he published in 1849, has been incorporated."

We have to congratulate Dr. Jerdon upon the issue of a second portion of his 'Birds of India'—a work upon the general scope and object of which we have already spoken*. The present volume (which is called vol. ii. part i.) completes the account of the great Insectorial Order, embracing the conclusion of the *Merulidæ*, the *Brachypodidæ*, *Sylviidæ*, and *Ampelidæ*, and the *Conirostres*, in which group Dr. Jerdon includes three families—*Corvidæ*, *Sturnidæ*, and *Fringillidæ*.

We have not often occasion to refer to the *Ornis* of former geological epochs, although the birds of all time, as well as those of every country, must be embraced in the studies of the true ornithologist. But the extraordinary interest that attaches itself to the fossil bird of the lithographic slate of Solenhofen, which has recently become national property, leads us to say a few words on Professor Owen's memoir on this subject†, which has been courteously communicated to us by the author.

The history of the *Archeopteryx* may be given in Professor Owen's own words:—

"The first evidence of a bird in strata of the Oxfordian or Corallian stage of the Oolitic series was afforded by the impression of a single feather, in a slab of the lithographic calcareous laminated stone or slate of Solenhofen; it is described and figured with characteristic minuteness and care by M. Hermann von Meyer, in the fifth part of the 'Jahrbuch für Mineralogie.' He applies to this fossil impression the term *Archeopteryx lithographica*;

* See *Ibis*, 1862, p. 219

† "On the *Archeopteryx* of von Meyer, with the description of the fossil remains of a long-tailed species, from the lithographic slate of Solenhofen," by Prof. Owen, F.R.S., *Phil. Trans.* 1863.

and although the probability is great that the class of birds was represented by more than one genus at the period of the deposit of the lithographic slate, and generic identity cannot be predicated from a solitary feather, I shall assume it in the present instance, and retain for the genus, which can now be established on adequate characters, the name originally proposed for it by the distinguished German palæontologist.

“ At the Meeting of the Mathematico-Physical Class of the Royal Academy of Sciences of Munich, on the 9th of November, 1861, Professor Andreas Wagner communicated the discovery, in the lithographic slate of Solenhofen, of a considerable portion of the skeleton of an animal, with impressions of feathers radiating fanwise from each anterior limb, and diverging obliquely in a single series from each side of a long tail.

“ These and other particulars of the fossil Professor Wagner gave on the authority of M. Witte, Law-Councillor (Oberjustiz-Rath) in Hanover, who had seen the fossil in the possession of M. Häberlein, District Medical Officer (Landarzt) of Pappenheim.

“ Upon the report thus furnished to him, Professor Wagner proposed for the remarkable fossil the generic name *Griphosaurus*, conceiving it to be a long-tailed Pterodactyle with feathers. His state of health prevented his visiting Pappenheim for a personal inspection of the fossil; and, unfortunately for palæontological science (which is indebted to him for many valuable contributions), Professor Wagner shortly after expired.

“ I thereupon communicated with Dr. Häberlein, and reported on the nature and desirability of the fossils in his possession to the Trustees of the British Museum. They were accordingly inspected by my colleague Mr. Waterhouse, F.Z.S.; and an interesting and instructive selection, including the subject of the present paper, has been purchased for the Museum.”

Archeopteryx, as is shown in the detailed examination of the fossil which succeeds its history, “differs markedly from all known birds in having two free unguiculate digits in the hand” resembling in this respect a Pterodactyle. But its chief interest centres in the excessive multiplication of the caudal vertebræ.

“ In Bats there are short-tailed and long-tailed species, as in

Rodents, Pterodactyles, and many other natural groups of air-breathing Vertebrates; and it now is manifest that, at the period of the deposition of the lithographic slate, a like variety obtained in the feathered class. Its unexpected and almost startling character is due to the constancy with which all birds of the neozoic and modern periods present the short bony tail, accompanied in most of them with that further departure from type exemplified by the coalescence and special modification of the terminal vertebræ, to form the peculiar 'ploughshare-bone' supporting the coccygeal glands, and giving attachment to the limited number of fanwise radiating rectrices, constituting the outward and visible tail in existing birds. All birds, however, in their embryonic state exhibit the caudal vertebræ distinct, and, in part of the series, gradually decreasing in size to the pointed terminal one.

"In the embryo Rook the proper extent of the caudal vertebræ is shown by the divergence of the parts of the ilia to form the acetabula; and as many as ten free but short vertebræ are indicated beyond this part. Five or six of the anterior of these subsequently coalesce with each other and with the hinder halves of the ilia, lengthening out the sacrum to that extent. The tail is further shortened by the welding together of three terminal vertebræ to form the ploughshare-bone.

"In the young Ostrich from eighteen to twenty such vertebræ may be counted, freely exposed, between the parts of the iliac bones behind the acetabula; of which vertebræ seven or eight are afterwards annexed to the enormously prolonged sacrum, by coalescing with the backwardly produced ilia; while two or three vertebræ are welded together to form the terminal slender styliform bone of the tail, without undergoing the 'ploughshare' modification. In *Archeopteryx* the embryonal separation persists with such a continued growth of the individual vertebræ as is commonly seen in tailed Vertebrates, whether reptilian or mammalian.

"Thus," concludes Prof. Owen, "we discern, in the main differential character of the by-fossil-remains-oldest-known feathered Vertebrate, a retention of a structure embryonal and

transitory in the modern representatives of the class, and a closer adhesion to the general Vertebrate type.”

2. FRENCH PUBLICATIONS.

Messrs. Florent Prévost and C. L. Lemaire have published a volume* on the birds of Europe, which has, at all events, the merit of being cheap. We believe it to be only recently published; but there is no date on the title-page or anywhere else in the volume, that we can discover. Although called a history of the birds of Europe, and spoken of in the *avant-propos* as about to treat of more than 400 species, the volume deals only with the Insessorial birds, or Omnivores, Insectivores, Granivores, and Zygodactyles and Anisodactyles of Temminck's arrangement. But no second volume is announced. The most novel thing we can find in it is the following truly French story of a Common Swallow :—

“ On dit qu'un cordonnier du Bâle, ayant mit à une Hirondelle de fenêtre un collier sur lequel était écrit—

‘ Hirondelle, qui est si belle,
Dis-moi l'hiver où vas-tu ? ’

reçut le printemps suivant, et par le même courier, cette réponse à sa demande—

‘ À Athènes, chez Antoine.
Pourquoi t'en informes-tu ? ’ ”

Even this, though amusing, has not, we fear, the merit of truth in its favour.

3. GERMAN PUBLICATIONS.

The second part of Wiegmann's ‘Archiv’ for 1863 contains the termination of Philippi and Landbeck's “Beiträge zur Fauna von Peru,” to which we referred in our last Number. Their new species *Leistes albipes* is closely allied to *Sturnella militaris* (at least we suppose this to be the species indicated by Philippi under the name *Leistes americanus*), and in all probability identical

* ‘ Histoire Naturelle des Oiseaux d'Europe,’ par Florent Prévost et C. L. Lemaire. 1 vol. 8vo, Paris, 80 coloured plates, price 25 fr.

with *S. bellicosa*, De Filippi, which we have received in collections from Ecuador. A third species of the group is *S. defilippii* from La Plata, easily distinguished by its black under-wing-coverts.

Recurvirostra andina (capite colloque albis: pallio, alis et cauda nigris: pedibus plumbeis), from Arica in Peru, seems to be a good new species of Avocet. The existence of an Avocet in South America has already been noted by Rengger (Reise nach Paraguay, p. 225) and A. d'Orbigny (Voy. pt. ii. p. 317), but this is, so far as we know, the first time the species has been identified.

Dasycephala albicauda is obviously an *Agriornis* allied to *A. livida* and *A. maritima*—two Chilian species, concerning the habits of which some good remarks are given subsequently (p. 136). Messrs. Philippi and Landbeck are, however, quite wrong in referring these birds to *Dasycephala*, that name of Swainson being synonymous with *Attila* of Lesson, and having for its type the *Muscicapa cinerea* (Gm.)—a more or less terrestrial bird of the forests of Brazil, very different in habits from the *Agriornithes* of the Andes and of the coasts of Chili and Patagonia.

A second paper by Messrs. Philippi and Landbeck, in the same Number of the 'Archiv,' gives a very interesting account of the four species of Geese found in Chili*. These are, according to Messrs. Philippi and Landbeck, *Bernicla melanoptera* (Eyton), *B. dispar*, sp. nov., *B. chiloensis*, sp. nov., and *B. antarctica* (Gm.).

Bernicla melanoptera, which is the "Piuque" of the Chilians and the "Huacha" of the Peruvians, is stated to inhabit the small lakes in the Cordilleras of Chili, at a height of 10,000 feet above the sea-level, and to breed there in pairs. In winter the families descend into the lower marshes. This Goose extends northwards from Chili into Bolivia and Peru. The sexes are alike, the female being, however, smaller in size.

This species, we may remark, is well figured in the 'Zoology of the Voyage of the Beagle,' Aves, pl. 50. There are five examples of it in the British Museum, amongst which is Eyton's type-specimen, and one from Lake Titicaca, Bolivia, obtained by Mr. Pentland.

* "Ueber die Chilenischen Gänse," *ibid.* p. 185.

Bernicla dispar, Philippi et Landb., sp. nov., which is the "Gansillo" of the Chilians, is stated to be common near Santiago in winter, and to breed in the middle provinces of Chili, on the Cordilleras, descending into the plains in winter. It is figured by Cassin in the 'Zoology of the United States Naval Astronomical Expedition' (pl. 24) under the name *B. magellanica*.

We believe Messrs. Philippi and Landbeck to be quite right in separating this bird from the true *B. magellanica*, in which the male is unspotted white below. There is a Chilian bird in the British Museum exactly corresponding with their description, except that the rectrices are all black. *B. magellanica* vera is found in the Falkland Islands, whence the Zoological Society of London obtained the specimens which now breed in their Gardens every year. It extends, however, over the southern part of South America, one example, marked "Chiloe," being in the British Museum.

Bernicla chiloensis, Messrs. Philippi and Landbeck's third species, is stated to be very common in the Island of Chiloe, where it is called "Canquen"; but also occurs as far north as Valdivia, from February to April. Our authors are quite correct in considering this species as distinct from the *Anas inornata* of King, although it is the bird figured in Mr. G. R. Gray's 'Genera of Birds' under that name, and has also been called by Gray *Bernicla inornata*. But it was not necessary to propose a new name for this unfortunate Goose, as it has also been called *poliocephala* by Mr. Gray in his Catalogue of the specimens of Anseres in the British Museum, and has long been well known as the Ashy-headed Goose (*Chloëphaga poliocephala*) in all the Zoological Gardens of Europe.

Bernicla antarctica (Messrs. Philippi and Landbeck's fourth species of Chilian Goose) appears in Chili only in winter, being occasionally found in the harbours of Corral and Arique, in the province of Valdivia. It is singular that while in this species, as in *Chloëphaga dispar* and *C. magellanica*, the sexes are so differently coloured that they run the risk of being considered different species, in *C. poliocephala* and *C. melanoptera* the male cannot be distinguished from the female except by size. This is likewise

the case with *Chloëphaga rubidiceps* of the Falkland Islands, which is closely allied to *C. poliocephala*.

A third paper* by the same writers, which follows the last, gives descriptions of a new Duck (*Querquedula angustirostris*), obtained by the deceased Herr Froben in Peru, and of a new Tern (*Sterna atrofasciata*) from the province of Colchagua, in Chili. The former species is stated to be allied to *Q. oxyptera*; but the affinities of the latter are not given.

The same Number of the 'Archiv' contains the commencement of an article, by Dr. A. Böcking, on the American *Rhea*†. The account of the habits of this bird seems to be very full and complete; but Dr. Böcking can never have seen a specimen of *Rhea darwini*, nor even, we should suppose, have read a description of it, or he could scarcely have called it a climatic subspecies of *R. americana*. Many generally recognized genera do not possess the strong characters that separate the former species from the latter and distinguish them in every stage from the egg upwards.

Herr Aug. von Pelzeln has lately commenced to publish, in the 'Verhandlungen' of the I. R. Zoological and Botanical Society of Vienna, a catalogue of the very fine series of *Vulturidæ* and *Falconidæ* in the I. R. Cabinet‡. The arrangement followed is nearly that of Gray: the recent synonyms, since the publication of the 'Genera of Birds,' are given very fully. The first part contains the Vultures and *Polyborinæ*, *Buteoninæ*, and a part of the *Aquilinæ*. The second part contains the completion of the catalogue of *Aquilinæ* and the *Falconinæ*. A third and concluding part, promised to appear shortly, will treat of the remaining subfamilies *Milvinæ*, *Accipitrinæ*, and *Circinæ*. Extracts from the late Johann Natterer's notes on many of the species are appended.

This catalogue is a most important contribution to our know-

* "Beschreibung einer neuen Ente und einer neuen Seeschwalbe," *ibid.* p. 202.

† "Monographie des Nandu oder sudamerikanischen Strausses (*Rhea americana*)," *ibid.* p. 213.

‡ "Uebersicht der Geier und Falken der kk. Ornithologischen Sammlung." Von Aug. v. Pelzeln. Verh. kk. Zool. Bot. Gesellschaft, 1862.

ledge of the Accipitres. The Vienna collection seems to be particularly rich in this order of birds. The former Custos, Johann Natterer, was not only a most diligent collector personally during his long travels in the different parts of the Brazilian empire (where he is stated to have obtained examples of 1000 species of birds), but also purchased largely in London and other places. There have been also many valuable specimens recently obtained from Heuglin, Kotschy, Ida Pfeiffer, and others.

4. DUTCH PUBLICATIONS.

Professor Schlegel has commenced the publication of a new illustrated work* on the birds of the Dutch possessions in the East Indies, of which we have seen one part. This embraces the genus *Pitta*,—the plan being to issue monographs of the different genera that have been worked out in the National Museum at Leyden, and so render the work an illustrated companion to the catalogue of the birds of that establishment given in the ‘Revue Méthodique des Collections du Musée des Pays-Bas.’ The work is intended to extend to about 100 plates, containing more than 800 figures, and to be completed in about five years. The principal portion of the text is in Dutch; but a *revue synoptique* of the species, in French, is appended. The figures are on a reduced scale. They are well executed, as we need hardly say, being drawn by Professor Schlegel himself, but perhaps not quite so carefully coloured as might be; but then the low price of the work must be taken into consideration.

The third livraison of the ‘Revue Méthodique des Collections du Musée des Pays-Bas’† contains the conclusion of the “*Buccones*,” by Lieut. A. Goffin; and lists of the “*Ardeæ*” and “*Alcedinides*,” and the first portion of that of “*Merops*,” by Professor Schlegel. Under the head of “*Buccones*” two very distinct families are united, namely the true *Bucconidæ* and the *Capitonidæ*. These groups differ not only in external form, but also in internal structure and in habits. The error of uniting

* De Vogels van Nederlandsch Indie, beschreven en afgebeeld door H. Schlegel. Haarlem, Kruseman, 1863, 4to, part i.

† See *Ibis*, 1863, pp. 105 et 358.

them was first pointed out by Dr. Cabanis, and has since been commented upon by Professor Burmeister, by ourselves, by Mr. Wallace, and by other writers. The *Capitonidæ* are closely allied to the Toucans in habits and structure. Like them, they have but ten tail-feathers, and the furcula imperfect at the junction of the rami. The *Bucconidæ*, on the other hand, are essentially allied to the Trogons and Jacamars, with which indeed they are united by Burmeister into one family.

The *Ardeæ* are divided by Professor Schlegel into sections which correspond to the different generic groups of most modern writers. If Prince Bonaparte, who published the last account of these birds in the second part of his 'Conspectus,' made too many species, Professor Schlegel cannot certainly be said to have erred on this side, and we think Professor Schlegel without doubt the more nearly right of the two. But we wish he had indulged us with *Latin* titles for the different sections of his *Ardeæ*, instead of terming them "Petits Hérons," "Aigrettes," &c.

In the "Alcedines," p. 43, we observe it stated somewhat positively as regards *Tanysiptera*, "On ne connaît jusqu'aujourd'hui que quatre espèces de ce petit groupe." Had Professor Schlegel seen Mr. Wallace's rediscovered *T. nympha* (P. Z. S. 1862, p. 165), he would hardly have said this; and in our opinion, if four species are to be allowed of the genus, we must admit all the nine, as given by Mr. Wallace (P. Z. S. 1863, p. 24).

5. AMERICAN PUBLICATIONS.

The Report of the Smithsonian Institution for 1861 contains a paper by Mr. E. Coues and Mr. D. W. Prentniss on the birds of the District of Columbia*. The list enumerates 226 species as being met with in this locality, of which only forty-four are "permanent residents." There are likewise forty-four "winter residents," *i. e.* species breeding further north, and fifty-nine "summer residents," *i. e.* species which resort to the District for the purpose of breeding there; the "spring and autumn visitants" are fifty-four; and those of accidental occurrence,

* "List of Birds ascertained to inhabit the District of Columbia, with the times of arrival and departure of such as are non-residents, and brief notices of habits, &c.," Smiths. Rep. 1861, p. 399.

twenty-five. We extract two passages from Messrs. Coues and Prentniss's general remarks on the Columbian avifauna:—

“Though the number of birds which are resident throughout the year and those which breed here is considerable, they are few in comparison with those which pass through during their spring and autumn migrations and remain for a longer or shorter time each season. The number of species, indeed, is not greater, but the individuals of each are very numerous. It is on this account that for a month or so during the spring and autumn (from about the 20th April to the 20th May, and from the 1st September to the middle of October) the collector is so amply repaid for his pains, while at other times ornithologizing, except for some particular birds, is hardly worth the time and trouble. So numerous, indeed, are individuals of most of the migratory species, that at the height of the season in spring we have collected in a walk before breakfast from forty to fifty specimens of various species of Warblers, Thrushes, Flycatchers, Finches, &c. As an instance of the number of birds which pass through the District on their way north to breed, compared with those which remain with us during the summer, may be cited the Wood-Warblers, or *Dendroica*. Of the twelve or thirteen Wood-Warblers found more or less abundantly in the spring and fall, only three are known to breed here. The same might be affirmed of other birds, as the Thrushes, Flycatchers, Sandpipers, &c. * * * *

“A circumstance which has considerable influence on the appearance of birds in the immediate vicinity is the presence of a large city. This is most strikingly shown in the case of the Ducks and other water-fowl, to which the attention of the sportsman is especially directed. The peculiar character of Chesapeake Bay and its tributaries renders them the favourite winter resort of nearly all the species of *Anatidæ*; but the incessant persecutions to which these birds are subjected have effected a material diminution of their numbers, and caused a great part of them to retire to the bogs and inlets of more southern shores. The same is true, though less markedly, of various shy and solitary birds (as for example the *Hylotomus pileatus*), which are gradually retreating with the clearing up of the forests to more mountainous

and inaccessible regions. Nevertheless the pertinacity with which some birds hold their ground is surprising. Thus the common Partridge, though so continually persecuted by sportsmen, is still very numerous even in the immediate vicinity of the city. A total change of habit by civilization, sometimes to be observed, is extremely interesting. There can be no doubt that, before the settlement of the country, the *Chætura pelasgia* bred in hollow trees. This habit is now totally lost, the bird finding chimneys better suited to its wants. In like manner, the *Hirundo horreorum* now breeds altogether on the rafters and beams of barns and outhouses, while the *H. lunifrons* is gradually abandoning the sides of cliffs for the convenient situations afforded by the projecting eaves of buildings. The *Progne purpurea* always gives preference to the boxes now everywhere placed for its accommodation."

In a new paper in the Philadelphian Academy's Proceedings* Mr. Coues completes his review of the North American *Laridæ*, treating of the third section of the Skuas, but embracing in his remarks, on this occasion, all the known species of the group. As in the case of former papers, Mr. Coues adopts ante-Linnean names for both genera and species, and thereby seeks to introduce what we consider objectionable changes into their nomenclature. Mr. Coues divides the Skuas into two genera, for the first of which, containing the *Larus catarractes* of Linnæus, and its (barely separable) southern representative, *Stercorarius antarcticus*, he uses Mœhring's term *Buphagus* (!) ; for the second, *Stercorarius* of Brisson. Of the latter group six species are enumerated, viz.,

1. *S. pomarinus* (Temm.) ex Eur. et Am. Sept.
2. *S. parasiticus* (Linn.) ex Eur. et Am. Sept.
3. *S. richardsoni* (Sw.) ex Am. Arct.
4. *S. hardyi* (Bp.) ex oc. Pacif. (?)
5. *S. spinicauda* (Bp.) ex oc. Atlant. (?)
6. *S. buffoni* (Boié) ex Eur. et Am. Sept.

Stercorarius richardsoni, we may remark, has been usually con-

* Proc. Acad. Philad. 1863, p. 121, "On the *Lestris richardsoni* of Swainson, with a critical review of the subfamily *Lestridinæ*."

sidered the same as the true *S. parasiticus* of Linnæus and Brün-
nich. But Mr. Coues has discovered several specimens of Skuas
from Arctic America in the Smithsonian Institution which “agree
minutely” with Swainson’s plate and figure, and appear to possess
differential characters* which indicate the existence in Arctic
America (of a second Skua) allied to *S. parasiticus*. With re-
gard to the fourth and fifth species, we believe them to be pure
figments, like many other “species” manufactured during the
declining hours of the late Prince Bonaparte.

Professor Baird has commenced publishing in the same Aca-
demy’s Proceedings some “Notes on the Birds of Jamaica, by
W. L. March,” who has been collecting in that island for the
Smithsonian Institution. The present portion refers to the
Accipitres and *Cuculidæ*. Among the former is *Cathartes atra-*
tus—a “recent settler in Jamaica,” not known to Mr. Gosse.

Mr. Lawrence has kindly forwarded to us a new part of his
catalogue of the birds collected in Panama by Mr. J. McLeannan,
containing additional species, and notes and remarks on former
published species†. The total number of species obtained by
Mr. McLeannan, who is, we believe, superintendent at one of
the stations of the railway, amounts now to 415. *Petrochelidon*
albilinea, Lawrence, we suppose to be the same Swallow as that
recently described by Mr. Salvin ‡ as *P. littorea*.

X.—*Letters, Extracts from Correspondence, Notices, &c.*

WE have received the following letters addressed “*To the
Editor*” :—

Porto S. Giorgio, September 12, 1863
(Italy, Marche).

Before reading, in the last Number of your periodical (July
1863), Mr. H. B. Tristram’s observations on what I had pre-

* “Major; rostro, tarsi alisque longioribus; cauda magis producta et
rotundata, rectricibus latioribus” (*l. c.* p. 135).

† “Catalogue of a Collection of Birds made in New Granada, by James
McLeannan, Esq., of New York, with Notes and Descriptions of New
Species.” Pt. 4. Ann. Lyc. Nat. Hist. New York, vol. viii. (May 1863).

‡ P. Z. S. 1862, p. 189.